

# MEASURING DEVICES

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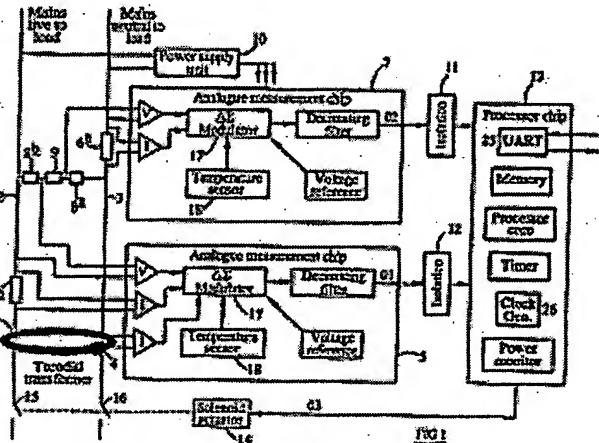
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## Abstract of WO02101397

A combined toroid/shunt device for detecting residual current in an electrical installation comprising a plurality of conductors such as a live conductor (2) and a neutral conductor (3) is described. The device comprises a toroid means (1, 4) for detecting an AC residual current within a first range and a plurality of resistive shunts (6a) to (6d) for connection in respective ones of the plurality of conductors. A current detection means (5, 7, 13) responsive to current flowing in each of said shunts for detecting a DC residual current and/or an AC residual current within a second range is described. The first range of AC residual current is an AC residual current resulting from earth leakage or cross-leakage between conductors up to a saturation level at which the toroid or electronic means associated therewith becomes saturated. The second range includes an AC residual current of said saturation level.



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